## Two new Gall Midges (Dipt.).

By E. P. Felt, Albany, N. Y.

The two West Indian species described below were reared by Mr. W. H. Patterson, of the School of Agriculture, St. Vincent, and recently sent to the writer for determination.

## Asphondylia vincenti n. sp.

This species was reared from the fruits of Jussiaea linifolia and J. suffrutiosa, at St. Vincent, W. I.

Male. Length 1.75 mm. Antennae nearly as long as the body, sparsely short-haired, dark brown; 14 sessile segments, the fifth with a length about five times its diameter; circumfili distinct, very tortuous. Palpi: first segment irregularly oval, with a length over twice its diameter, the second slender. nearly three times the length of the first. Mesonotum a nearly uniform slaty brown, the submedian lines sparsely haired. Scutellum fuscous yellowish, postscutellum darker. Abdomen sparsely haired dark brown. Wings hyaline, costa light brown, subcosta uniting therewith just before the basal half, the third vein at the apex of the wing, the fifth just beyond the distal third, its branch just before the basal half. Legs mostly a variable fuscous yellowish, the tarsal segments being darker, except the yellowish brown tibiae and first four tarsal segments of the posterior legs; simple claws rather slender, strongly curved, the pulvilli as long as the claws. Genitalia; basal clasp segment short, greatly swollen; terminal clasp segment short, swollen, bidentate apically; dorsal plate divided, the lobes narrowly oval and thickly setose apically; ventral plate small, apparently bilobed.

Female. Length 2 mm. Color characters nearly as in the male. Antennae: the fifth segment with a length about five times its diameter, the 12th with a length ½ greater than its diameter, the 13th a little shorter, the 14th flattened, subglobose. Palpi: the first segment with a length nearly three times its diameter, the second slender, ½ longer; posterior tibiae and first four tarsal segments markedly lighter than in the male. Ovipositor when extended about as long as the body, the acicula slender, acute; dorsal pouch moderate sized, the lobes thickly setose and narrowly rounded apically.

Pupa. Length 2 mm. Oval, stout, yellowish brown; cephalic horns moderately long, stout, the inner oblique margins finely serrate; antennal cases extending to the first abdominal segment, the wing cases to the fourth and the leg cases to the sixth. Just below the base of the antennae and on the venter there is a median, triangular, chitinous pro-

cess. and a little behind that a bidentate, chitinous process with a minute median tooth. Pupal skin thickly set with chitinous points or corrugations. Abdominal segments each with the dorsum ornamented with two sparse, transverse rows of stout spines, these becoming irregular on the terminal segment, the apex being marked with a group of two or three divergent, sublateral spines.

Larva, Length 2 mm. Rather stout, white, distinctly segmented; head extremely broad, only the tips of the slightly protuberant mouthparts being fuscous; antennae short, extremely minute, the whole greatly obscured by the large, strongly chitinized breastbone, which latter is broad, anteriorly, quadridentate, being divided by a median incision into two groups of minor teeth; shaft rather indistinctly chitinized and supported by submedian, chitinous, rounded lobes; skin coarsely shagreened.

Type Cecid a2118, N. Y. State Museum.

## Hyperdiplosis eupatorii n. sp.

This species was reared from a green, conical gall with a length of about 4 mm. and a diameter of 1.5 mm., on the upper surface of the leaves of *Eupatorium*, the insects pupating within the deformity. This form is provisionally referred to *Hyperdiplosis*, because it agrees therewith in the triarticulate palpi, the reduced circumfili and the deeply and roundly excavated ventral plate. The antennal stems of the typical *Hyperdiplosis* are more produced and the claws more strongly bent than in this West Indian form.

Male. Length 1.1 mm. Antennae 1/2 longer than the body, thickly haired, fuscous vellowish; 14 segments, the fifth having the basal portion of the stem with a length 1/2 greater than its diameter, the distal part with a length 21/2 times its diameter; basal enlargement subglobose, a sparse subbasal whorl and a subapical circumfilum, the loops short and reaching only to the middle of the stem; the distal enlargement with a length 1/2 greater than its diameter, a scattering whorl of setae, subbasal and subapical circumfili, the loops of each short, those of the distal filum not extending to the tip of the segment; terminal segment having the distal enlargement subcylindric, with a length 21/2 times its diameter and a stout, finger-like process apically. Palpi; first segment short, irregular, the second with a length three times its width, the third nearly twice the length of the second, more slender. Mesonotum light brownish red, the yellowish submedian lines sparsely haired. Scutellum and postscutellum yellowish. Abdomen yellowish red, the fifth to seventh segments yellowish; genitalia reddish. Wings hyaline,